

WHAT IS CLAIMED IS:

1. For use with an integrated circuit package having first
2 and second signal transmission zones, a characteristic impedance
3 equalizer, comprising:

4 a first conductor having a first width and providing a
5 characteristic impedance within said first signal transmission
6 zone; and

7 a second conductor, coupled to said first conductor, having a
8 second width and providing substantially said characteristic
9 impedance within said second signal transmission zone.

2. The characteristic impedance equalizer as recited in
1 Claim 1 further comprising a plurality of said first and second
3 conductors coupled to a substrate.

3. The characteristic impedance equalizer as recited in
2 Claim 1 wherein said first signal transmission zone is provided
3 between a portion of said substrate containing said first conductor
4 and a metallic heatspreader.

4. The characteristic impedance equalizer as recited in
2 Claim 1 wherein said second signal transmission zone is provided
3 between a portion of said substrate containing said second
4 conductor and a metallic stiffener.

5. The characteristic impedance equalizer as recited in
2 Claim 1 wherein said first width is greater than said second width.

6. The characteristic impedance equalizer as recited in
2 Claim 1 wherein a junction between said first conductor and said
3 second conductor has a semi-circular cross-sectional area.

7. The characteristic impedance equalizer as recited in
2 Claim 1 wherein said first and second conductors provide a
3 transmission path for a signal transmission.

8. A method of manufacturing an integrated circuit package,

2 comprising:

3 providing a substrate configured to be partitioned into first
4 and second signal transmission zones;

5 forming a first conductor having a first width and providing
6 a characteristic impedance within said first signal transmission
7 zone; and

8 forming a second conductor having a second width and providing
9 substantially said characteristic impedance within said second
10 signal transmission zone.

9. The method of manufacturing as recited in Claim 8 further
2 comprising forming a plurality of said first and second conductors.

10. The method of manufacturing as recited in Claim 8 further
2 comprising positioning a metallic heatspreader over a portion of
3 said substrate containing said first conductor and forming said
4 first signal transmission zone.

11. The method of manufacturing as recited in Claim 8 further
2 comprising positioning a metallic stiffener over a portion of said
3 substrate containing said second conductor and forming said second
4 signal transmission zone.

12. The method of manufacturing as recited in Claim 8 wherein
2 said first width is greater than said second width.

13. The method of manufacturing as recited in Claim 8 further
2 comprising forming a junction between said first conductor and said
3 second conductor having a semi-circular cross-sectional area.

14. The method of manufacturing as recited in Claim 8 wherein
2 said first and second conductors provide a transmission path for a
3 signal transmission.

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15. An integrated circuit package, comprising:

2 a substrate configured to be partitioned into first and second
3 signal transmission zones; and

4 a characteristic impedance equalizer, including:

5 a first conductor having a first width providing a
6 characteristic impedance within said first signal transmission
7 zone, and

8 a second conductor having a second width providing
9 substantially said characteristic impedance within said second
10 signal transmission zone.

16. The integrated circuit package as recited in Claim 15

2 wherein said characteristic impedance equalizer contains a
3 plurality of said first and second conductors.

17. The integrated circuit package as recited in Claim 15

2 further comprising a metallic heatspreader and said first signal
3 transmission zone is provided between a portion of said substrate
4 containing said first conductor and said metallic heatspreader.

18. The integrated circuit package as recited in Claim 15
2 further comprising a metallic stiffener and said second signal
3 transmission zone is provided between a portion of said substrate
4 containing said second conductor and said metallic stiffener.

19. The integrated circuit package as recited in Claim 15
2 wherein said first width is greater than said second width.

20. The integrated circuit package as recited in Claim 15
2 wherein a junction between said first conductor and said second
3 conductor has a semi-circular cross-sectional area.

21. The integrated circuit package as recited in Claim 15
2 wherein said first and second conductors provide a transmission
3 path for a signal transmission.

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